CE 140L: TRANSPORTATION ENGINEERING LABORATORY

In Workflow

1. CE Committee Chair (j.garcia@csus.edu)
2. CE Chair (khan@csus.edu)
3. ECS College Committee Chair (abadi@csus.edu)
4. ECS Dean (arad@csus.edu)
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6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (james.german@csus.edu; renee.leonard@csus.edu)
8. Dean of Graduate (cnewsome@skymail.csus.edu)
9. Catalog Editor (catalog@csus.edu)
10. Registrar's Office (wlindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Sat, 17 Sep 2022 21:58:27 GMT
   Jose Garcia (j.garcia): Approved for CE Committee Chair
2. Sun, 18 Sep 2022 00:24:41 GMT
   Ghazan Khan (khan): Approved for CE Chair
3. Fri, 23 Sep 2022 17:47:53 GMT
   Masoud Ghodrat Abadi (abadi): Approved for ECS College Committee Chair
4. Mon, 26 Sep 2022 17:20:41 GMT
   Behnam Arad (arad): Approved for ECS Dean

History

1. Apr 26, 2021 by Julie Fogarty (fogarty)
2. Jun 8, 2022 by 302822325

Date Submitted: Fri, 16 Sep 2022 22:23:22 GMT

Viewing: CE 140L : Transportation Engineering Laboratory
Last approved: Wed, 08 Jun 2022 14:03:52 GMT
Last edit: Fri, 23 Sep 2022 17:47:28 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Ghazan Khan	khan@csus.edu	916-278-3886

Catalog Title:
Transportation Engineering Laboratory

Class Schedule Title:
Transpo Engr Lab

Academic Group: (College)
ECS - Engineering & Computer Science

Academic Organization: (Department)
Civil Engineering

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Fall 2023 (2023/2024 Catalog)

Subject Area: (prefix)
CE - Civil Engineering

Catalog Number: (course number)
140L

Course ID: (For administrative use only.)
203297

Units:
1

Is the primary purpose of this change to update the term typically offered or the enforcement of requisites at registration?
No

In what term(s) will this course typically be offered?
Fall, Spring

Does this course require a room for its final exam?
No, final exam does not require a room

This course complies with the credit hour policy:
Yes

Justification for course proposal:
Changed CE 101 to be a concurrent prerequisite to remove structural barrier to student success and align all upper-division CE core courses (CE 130/140/150/160/170 and labs) as CE 150/150L already has CE 101 as a concurrent prerequisite. While skills gained from CE 101 are relevant to upper-division CE students, the course content can be taken at the same time as their core courses.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Laboratory course that supports CE 140. Activities include speed survey and safety assessment, analysis of freeway level of service, analysis of intersection delay and level of service, roadway geometry design, and pavement design using field measurements, online datasets, and state-of-the-practice software. Laboratory three hours. This course requires personal protective equipment (PPE).

Are one or more field trips required with this course?
No

Fee Course?
No

Is this course designated as Service Learning?
No

Is this course designated as Curricular Community Engaged Learning?
No

Does this course require safety training?
Yes

Does this course require personal protective equipment (PPE)?
Yes

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)
This course requires safety training

Does this course have prerequisites?
Yes

Prerequisite:
CE 1, CE 9, CE 9L, CE 101, ENGR 115, and CE 140. CE 140 may be taken concurrently. CE 101 may be taken concurrently. WPJ Score of 70+ or equivalent. Not currently enrolled in CE 140L.

Prerequisites Enforced at Registration?
Yes

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Lecture

Lecture Classification
CS#16 - Science Laboratory (K-factor=2 WTU per unit)

Lecture Units
1

Is this a paired course?
No

Is this course crosslisted?
No

Can this course be repeated for credit?
No

Can the course be taken for credit more than once during the same term?
No

Description of the Expected Learning Outcomes and Assessment Strategies:

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Perform Time Mean Speed (TMS) and/or Space Mean Speed Studies.	Lab reports
2	Calculate Freeway Level of Service (LOS) using Intelligent Transportation System (ITS) data sources.	Lab reports
3	Conduct data collection at signalized intersections and model traffic conditions using microsimulation software.	Lab reports
4	Design highway geometry including horizontal and vertical alignments and calculate highway earthwork.	Lab reports
5	Prepare various designs and conduct life cycle cost analysis for highway pavement.	Lab reports

Attach a list of the required/recommended course readings and activities:
2020 Fall - CE140L - Syllabus-v2.docx

Is this course required in a degree program (major, minor, graduate degree, certificate?)
Yes

Has a corresponding Program Change been submitted to Workflow?
Yes

Identify the program(s) in which this course is required:

Programs:
BS in Civil Engineering

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?
No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines
Knowledge of human cultures and the physical and natural world
Integrative learning
Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Key: 14146